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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/741,676

12/19/2003

Jaroslav J. Sydir

Intel-019PUS

4166

7590 02/02/2007
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EXAMINER

YOUNG, NICOLE M

ART UNIT

PAPER NUMBER

2109

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/741,676

Applicant(s)

SYDIR ET AL.

Examiner

Nicole M. Young

Art Unit

2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/01/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Fig. 1 needs to have the label "authentication buffer group" next to number 28 as described in the specification on page 5 line 6, FIG. 2 does not include authentication buffer 70 as described in the specification page 9 line 16 and Fig. 2A and Fig. 2B need to have the label "authentication buffer" with number 70.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: page 2 lines 19-20 should read, "provide **the** part of the data in a network packet **that** is subject" and line 28 should read "not **necessarily** a."

The use of the trademarks "Intel" and "Intel Corporation" have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 14 is directed to "a computer program medium having computer readable code." There is nothing in the specification or claim defining the structure of the "computer program medium." This is therefore interpreted by the Examiner to be an entirely software, which is non-statutory subject matter under 35 U.S.C.101.

Claims 15-18 do not further explain any structural components. Therefore, they are interpreted as software as well and are non-statutory.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by **Ohta et al. (US 2002/0083317)**.

Claims 1-18:

Paragraph [0011] teaches a security communications packet processed by a network device, which comprises an encryption processing unit and an authentication processing unit. The packet is first broken into data blocks and stored block by block in buffers ("data block accumulation units"). When the block size reaches a target size, it is moved into the encryption processing unit. Then outputted into an authentication buffer until it reaches a targeted size and moved into the authentication processing unit.

The buffers would be capable of processing the data blocks in a FIFO arrangement with a moveable start and end pointer.

Further information about the target sizes of the data blocks is taught in paragraph [0016] including differing sizes for the encryption algorithm and authentication algorithm

Further information about the types of data is taught in paragraph [0044] including data to be processed by both the encryption and authentication units,

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only one or the other unit, or if the data block needs to be encrypted or decrypted.

Paragraph [0104] teaches multiple encryption and authentication processing units with multiple data block accumulation units as in claim 10. Also paragraphs [0137] and [0138] teach a method for processing priority data blocks first. When a high priority data block needs processing the encryption or authentication buffer saves the lowest priority data block to the "processing data saving unit." The encryption or authentication processing unit then processes the high priority data from the data block accumulation unit. After it is done, it retrieves the data from the processing data saving unit. The processing data saving unit is interpreted by the Examiner to be a second buffer. Figures 8, 9a, and 9b show the processor as a network as in claim 5. Paragraph [0017] teaches this process as a method or a computer program as in claims 9 or 14 respectively.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Candelore et al. (US 6,061,449) discloses a processor with encryption and authentication of data through block buffers. **Hawkes et al. (US 2004/0019783)** discloses authentication of plaintexts and ciphertexts. **US 2004/0019782** discloses fast authentication and encryption of plaintexts and ciphertexts. **Koopman, Jr. et al. (US 5,377,270)** discloses a plurality of encryption and authentication. **Krishna et al. (US 6,971,006)** discloses

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cryptographic acceleration by the use of varying size IP packets. **Lai (US 2004/0039936)** discloses parallel processing of encryption and authentication. **Mizrah (US 7,073,067)** discloses authentication of blocks of bits starting at random spaces in memory. **Mowery et al. (US 2004/0117642)** discloses processing a plurality of encryption and authentication techniques. **Platko et al. (US 6,363,444)** discloses authentication and encryption using a FIFO buffer. **Tardo (US 7,082,534)** discloses authentication and decryption methods in blocks received where authentication can be done without having to wait for total decryption of the data. **Intel Corporation** discloses a network processor that accelerated packet processing for multiple cryptographic schemes.

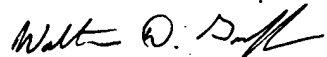
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole M. Young whose telephone number is 571-270-1382. The examiner can normally be reached on Monday through Friday, alt Fri off, 7:30-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NMY



WALTER D. GRIFFIN
SUPERVISORY PATENT EXAMINER